How to make e-learning courses in curricula of natural resources management more sustainable?

- why e-Learning?
- sustainable courses
- a new partnership
- outlook

Siegfried Lewark
“... the Internet may be the means of realizing a forestry lecturer’s dream.

Imagine being able to discuss, for example, different timber harvesting systems used internationally with a group of motivated students from different regions of the globe in one virtual classroom.”

(Längin, Ackerman & Lewark, 2004)
Make e-learning courses more sustainable

potential of e-learning

learning: any time, any place, any pace

teaching: sharing resources, low cost

University: creates income

BUT: sobering after euphoria
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think of a Master student or a PhD researcher in your university

interested in

- grassland ecology
- NFTP use
- land use rights in the tropics
- ethics
- gender studies
- forest inheritance patterns in the Nordic countries
this student may find

- experts somewhere in the world
- publications, internet information
- specialized courses

but very often no means of going there for personal contact or participation
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the experts / teachers may find

- few students in their own universities
- little chance for their courses in curricula
- courses not counted for workload
- little encouragement
this calls for distance learning solutions!

but it is not only about „exotic courses“, it may also fit for specialized courses which are well established somewhere, and later also for „standard“ courses?
Make e-learning courses more sustainable

how could a sustainable course offer look like?

re relevant and attractive topic

anchoring in curriculum

accessible & recognised from outside

good didactical approach
Make e-learning courses more sustainable

Gender roles in environmental management (internet course)

**Dates:** February till June 2008  
**Credits:** 5 ECTS credits

Learning/teaching will be organised interactively using an internet based e-learning platform. Learner orientation, learning methods: literature search and evaluation, assignments, biographical interviews – communication tools: e-mail, fora, chats. We will offer – in a sense of blended learning – a face-to-face phase at the beginning (details to be announced to accepted participants) at the universities of Freiburg and Joensuu (obligatory for participants from those universities).

**Teaching staff:** Prof. Dr. Siegfried Lewark, Dr. Marion Karmann

**Level:** The course will be open for graduate and PhD-students. Details to be agreed upon during the starting phase.
## Course elements and requirements

18.00 h Freiburg time is standard

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<th>extra chats</th>
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## Assignments

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<td>interview 2</td>
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<td>concluding essay</td>
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## Requirements

- participation in at least 6 chats (or extra chats)
- all assignments (Joensuu group only ass 1 to 4)
- at least 2 interviews
- self presentation

## Grading base

- concluding task (essay)
- one interview, selected by participant
a new attempt to give some support
the World-wide E-Learning Academy for Natural Resources, Forestry & Wood Science

regulations: course format, course delivery, credit recognition, accreditation, tuition fees
the World-wide E-Learning Academy for Natural Resources, Forestry & Wood Science

**regulations:** course format, course delivery, credit recognition, accreditation, tuition fees

**model 0:** single courses offered, propagated, made accessible
courses existing or to be developed
the World-wide E-Learning Academy for Natural Resources, Forestry & Wood Science

**regulations:** course format, course delivery, credit recognition, accreditation, tuition fees

**model 0:** single courses offered, propagated, made accessible
- courses existing or to be developed

**model 1:** course package -
- to be developed

**project 1.1:** e.g. bioenergy

**project 1.2:** ... governance

**project 1.x:** xxx
the World-wide E-Learning Academy for Natural Resources, Forestry & Wood Science

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**model 2:** curriculum
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- certificate at one university

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**project 2.1:** e.g. bioenergy

**project 2.x:** xxx
the World-wide E-Learning Academy for Natural Resources, Forestry & Wood Science

**Regulations:** course format, course delivery, credit recognition, accreditation, tuition fees

**Model 0:** single courses offered, propagated, made accessible
courses existing or to be developed

**Model 1:** course package - to be developed

**Model 2:** curriculum - to be developed - certificate at one university

**Model 3:** curriculum - to be developed - double / multiple university diploma

**Project 1.1:** e.g. bioenergy

**Project 1.2:** ... governance

**Project 2.1:** e.g. bioenergy

**Project 2.x:** xxx

**Project 1.x:** xxx

**Project 3.1:** e.g. bioenergy
ORGANISING UNIVERSITIES

COLLABORATORING UNIVERSITIES
with e-learning experience

COLLABORATORING UNIVERSITIES
not yet e-learning experienced

NETWORKS

NETWORKS

welan
World-wide E-Learning Academy
for Natural Resources,
Forestry and Wood Science
Make e-learning courses more sustainable

IPFE is launching a marketplace for distance education (E-learning) courses in forestry

Today’s forestry graduates face increasingly complex working environments. Graduates need to be equipped to deal with emerging paradigms of global dimensions such as integrated ecosystem management, landscape restoration, deforestation, forest governance, forest biodiversity, forest and climate change to name a few. Most universities do not have the teaching resources to offer all of this.

This knowledge and required expertise could be made available to students in any location through the use of information and communication technologies such as E-learning. E-learning can provide independent virtual learning environments tailored to the needs of customers anywhere in the world. Considerable effort and money has already gone into the development of E-learning courses in forestry, but unfortunately sustainable examples are few. In many cases E-learning opportunities were not well promoted or were not easily accessible and supply did not meet demand.
Virtual studies of the member universities (in alphabetical order):

1. Oregon State University

NEW: Master of Natural Resources (MNR) Graduate Degree – Online

Beginning in academic year 2010-2011

Overview: This 45-credit online master's degree program is designed to bring together university scientists and world-wide natural resource professionals to address natural resource challenges at the state, regional, national, and international levels. The curriculum combines multiple disciplines to develop competency in integrating specialized resource knowledge across multiple scientific fields. Students will integrate knowledge of the interaction of ecological, economic, ethical, production, and social systems to find solutions to complex natural resource issues.

For more information, please contact Dr. Badege Bishaw Badege.Bishaw@oregonstate.edu

Sustainable Natural Resources Graduate Certificate – Online

Overview: This 18-credit online certificate is designed for all students, especially company, industry or agency employees who desire training in solving complex sustainability problems. The curriculum is structured to address natural resource management issues anywhere in the world, therefore expanding its educational value beyond Oregon’s ecosystems.

Website: http://ecampus.oregonstate.edu/online-degrees/graduate/sustainability/

Other Online Natural Resource-Related Degrees from OSU:

Graduate:
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- **Infrastructure**
  - Learning platform
  - Hardware
  - Internet access

- **Commitment, will**
  - Going for competence
  - Curiosity

- **Need, reason, advantage**
  - Specialized expertise
  - Interest in IT
  - E-learning competence

- **Target group**
  - Students on campus
  - Students worldwide
  - Graduates in jobs
  - New groups

- **Didactical approach**
  - Learner orientation
  - Moderation
  - Blended learning

- **Funding**
  - Earning money
  - Open education resource

- **Sustainable e-learning**

- **Structural rooting**
  - Place in curriculum
  - Recognition elsewhere
  - WELAN
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Open Education Resources (OER)

great idea

great e.g. for African students

but then – who pays?

worth more consideration
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How to?

- teacher can do it easily, little input
- learner oriented
- open resource learning platform
- use the freedom you have
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what could be done?

- hold courses together
- develop and offer special courses
- make courses accessible & recognized
- inform & encourage students
Some concluding remarks

- e-learning can enrich MSc programmes
- rather elective courses
- providing time slots advisable
- students should be encouraged
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more concluding remarks

- recognition should be facilitated
- learner oriented methods important
- open learning resources explored
- WELAN may help in future
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Gender & environmental management: state of knowledge

- Problem based learning (adapted)
- Five corners of our course
- Products: assignments, interviews & brochure
- E-learning
- Gender & env. man.: scientific methods